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**ABSTRACT OF**
**THE ARMY...FROM THE SEA**
**THE ARMY SEEKS TO ENHANCE OPERATIONAL AGILITY**

The Army as part of its strategic mobility program (ASMP) recently launched its Army Prepositioning Afloat (APA) program also known as Army War Reserve -3 (AWR-3). The intent is to preposition a heavy brigade and a theater sustainment package afloat in order to bolster up some of the identified shortfalls that the Army experienced during Desert Storm. APA, as the Marine Corps' Maritime Prepositioning Force (MPF), is designed to give the Army a rapid entry capability into a theater of operations. This study analyzes why the Army is prepositioning a heavy brigade afloat while the Marine Corps already has a preexisting program that provides forces for crisis response.

The analysis demonstrates that the change in Army prepositioning to include a heavy brigade afloat is necessary to meet the changing threat and to comply with the National Security Strategy (NSS), National Military Strategy (NMS), the Mobility Requirements Study (MRS) and identified requirements by the CINCs. This analysis concludes that the Army's combat brigade afloat initiative is an enabling force of theater level campaigning with unique and complementary capabilities.

The Army's brigade afloat program provides from the sea -- a versatile, lethal, sustainable, and expansive heavy brigade. APA is critical to insure the nation has the capability to quickly project heavy combat power. The combination of APA and MPF gives a CINC a catalog of options to mix based upon his METT-T (Mission, Enemy, Troops available, Terrain, and Time) assessment. The monograph is 44 pages long, 66 with appendicies and notes.

# THE ARMY... FROM THE SEA, THE ARMY'S INITIATIVE TO ENHANCE OPERATIONAL AGILITY

A Monograph
By
Lieutenant Colonel Jack R. Brown
Infantry


School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

Second Term AY 94-95

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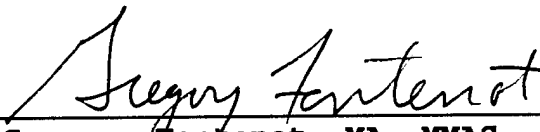

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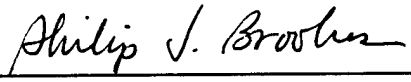

Philip J. Brookes, Ph.D. — Director, Graduate Degree Program

Accepted this 19th Day of May 1995

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> They look the same and work the same. So What's the difference between the US Marine Corps' Maritime Prepositioning Ships and the newly launched US Army Prepositioned Afloat Program? or between the Army and Marines for that matter? These, and other related questions are being asked now that the Army has a prepositioning ship program similar to the Marines.
>
> Lt. Col. Paul D. Wisniewski, USMC
> Dueling Prepo, Armed Forces Journal
> September 1994

The 1992, Department of Defense's (DoD) Mobility Requirements Study (MRS) made sweeping changes in the apportionment of strategic sealift. It directed that the Army preposition afloat a heavy combat brigade and a theater sustainment package. A strategy of power projection with a Continental Army means that the positioning, staging, and transportation of men, equipment, and supplies is even more critical today than in the past. The Army designated its prepositioned afloat (APA) program as Army War Reserve - 3 (AWR-3).

In light of the existing Marine Corps' Maritime Prepositioning Force (MPF), debate over the need for APA quickly emerged. Senator Sam Nunn, in July 1992 speaking before Congress questioned the need for both in a time of budgetary constraints:

> "The fundamental question is not what's best for the Army or the Marine Corps. The question is what is best for America?".[1]

Numerous proponents of the United States Marine Corps argue that maritime prepositioning is uniquely naval in character and view APA as an invasion of the Corps' immanent domain.[2] Many believe that APA is redundant to MPF and see the Corps

engaged in not merely a roles and mission debate but a decisive battle for the Corps very existence.[3]

**RESEARCH QUESTION.**

Considering the Marine Corps' MPF and the change in the Army's mission from forward defense to force projection and crisis response, is the Army's prepositioning afloat (APA) program truly needed?

**SCOPE.**

This monograph focuses specifically on the utility of the Army's Prepositioning Afloat (APA) program in light of the existence of the Marine Corps' Maritime Prepositioning Force (MPF). It concentrates on answering the following questions: 1) Why has the Army prepositioned afloat a heavy combat brigade and a theater sustainment package? 2) Are APA and MPF complementary or redundant capabilities? 3) Does APA improve operational agility for warfighting CINCs?

**METHODOLOGY.**

This monograph scrutinizes the historical underpinnings of Army and Marine Corps prepositioning in relationship to strategic mobility. Next it examines how the APA concept evolved in view of the changing threat, the National Security Strategy (NSS), the National Military Strategy (NMS), the Mobility Requirements Study (MRS), and the Bottom-Up Review (BUR). The paper then examines APA and MPF in regard to their respective roles and missions, followed by a comparison of both APA and MPF utilizing the Army's combat functional areas ( also known as the battlefield operating systems). It concludes by answering the research question.

## CHAPTER II -- HISTORICAL OVERVIEW OF ARMY AND MARINE CORPS PREPOSITIONING (1961 - 1990)

After World War II, as the United States entered into the Cold War it adopted a policy of containment of Communist aggression through forward defense. Throughout the Cold War the United States based its strategy for the Army on maintaining a large forward presence. In the early 1960s, the Research Analysis (RAND) Corporation, the Joint Chiefs of Staff (JCS) and Commander in Chief, Europe (CINCEUR) conducted numerous studies concerning strategic mobility, force projection, and forward deployment.[4] The National Military Strategy (NMS) called for a large, forward deployed Army, reinforced in 14 days with two heavy divisions (later expanded to six) from the Continental United States (CONUS).[5]

The 1961 Berlin wall crisis demonstrated how badly broken the Nations strategic mobility program was. Berlin Airlift after action reports demonstrated to the CINCEUR and the JCS that the existing strategic air and sea lift assets could not match the existing deployment requirements.

Sealift is able to move massive amounts of supplies and equipment to a theater of operation. However, a serious limitation to sealift is its lack of speed in comparison with airlift. Existing ships were too slow to meet the deployment requirements. Airlift while able to move personnel and equipment quickly is limited by the tonnage and cubage that it can transport. Airlift is extremely expensive in comparison to sealift. RAND concluded that while airlift was faster than sealift it could only play a supporting role. This was due to its high cost. Concerning sealift, RAND stated that while more

economical and possessing enormous lift capability, it could not meet the 14 day deployment window established by the JCS and CINCEUR.

CINCEUR, in response to the report requested RAND consider the use of prepositioned unit sets of equipment. CINCEUR postulated that given fiscal constraints to airlift and sealift, prepositioning could be used as a method to enable faster deployment time to the theater of operations. Prepositioning of equipment and materiel could allow for cost effective, and flexible conventional response.[6] In 1964, RAND agreed that prepositioning could alter the strategic mobility equation. RAND concluded that a mix of airlift, sealift, and prepositioning was the only viable solution. This mix became known as the Strategic Mobility Triad.[7]

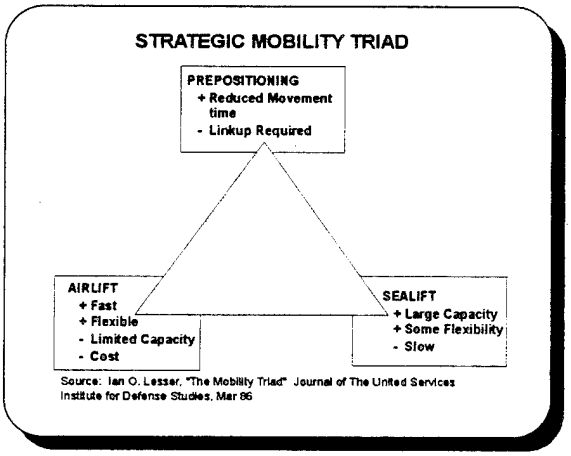



Figure 1.

Rand's, Richard Rainey explored options of land based and maritime prepositioning.[8] Rainey determined given the situation as it existed in NATO that land based prepositioning was preferable over maritime prepositioning. This was due to a number of reasons: First, land base prepositioning is less destructive to the equipment. Second, equipment maintenance is significantly less expensive and easier to perform. Third, Germany provided the land for prepositioning sites and NATO helped defray the cost of facilities. Fourth, the response time for deployment to Tactical Assembly Areas (TAA) is quicker, and has fewer complications. Finally, land

based prepositioning in Europe was suitable because the Warsaw-Pact threat was largely static and well defined.

The Army labeled its land base prepositioning program as the Prepositioning of Materiel Configured in Unit Sets (POMCUS). CINCEUR and the JCS saw the potential for POMCUS as a deterrent against the Warsaw Pact. Deterrence requires a posture that demonstrates strong resolve and capability while at the same time does not appear too threatening. NATO conducted an annual training exercise, called Return of Forces to Germany (REFORGER). The purpose of this exercise was to demonstrate training readiness and resolve. Each year, Army units deployed to Germany, via air and sea, drew their equipment at POMCUS sites, and then moved to their assembly areas. The Warsaw Pact monitored these exercises very closely.

The Army did not abandon the idea of afloat prepositioning as a concept. While land based prepositioning proved to be optimal for NATO it did not for the war in Vietnam. The Army established its first afloat prepositioning program in the mid-1960s off the coast of Vietnam. Unlike POMCUS, it did not provide unit sets for arriving units. Instead it provided only critical supply items. Its purpose was merely to enhance logistical responsiveness within the theater of war. Army afloat prepositioning was useful in Vietnam. However, it offered little flexibility to respond to a crisis in another theater of operation. The prepositioning ships used were basically barges. At the conclusion of the Vietnam War, the Army deactivated its prepositioning afloat program.[9]

A Joint Army-Navy study conducted in the mid-1960s on world-wide logistics concluded that the best solution to existing problems was the establishment of a 30

ship fast sealift floating supply fleet that could be responsive to global crises. Congress funded the program in 1966, then canceled it in 1967.[10]

The early 1970s found the Soviet Union intimately tangled in Middle Eastern affairs. The 1973 Arab-Israeli War shocked American strategic planners into an understanding that the United States faced a major threat of Soviet intervention in South West Asia (SWA). The area could provide the Soviets two valuable resources, control of the world's oil markets and a badly needed warm water port. In response to the Soviets immediate interest in the area and the OPEC oil embargo, Congress considered the possibility of creating a maritime prepositioning fleet for crisis response in the region.[11]

During the Carter administration it became even more clear that the Soviet Union was earnestly intent on fostering regional instabilities in an effort to enhance its influence throughout the globe, especially in SWA. The Carter administration, just as the Nixon and Ford administrations before, considered SWA with its rich oil fields to be of vital interest to the United States' economy. On the bases of increased Soviet involvement in the region, President Carter created the Rapid Deployment Joint Task Force (RDF). While the bulk of the Army was engaged in containment of Communism in Europe and Korea, the Army's XVIII Airborne Corps and the Marine Corps formed the basis of the RDF.

The Marine Corps' Maritime Prepositioning Force (MPF) concept evolved as a means to meet the strategic mobility challenges presented by the RDF's crisis response mission in SWA. SWA presented the Marines and the XVIII Airborne Corps

with a serious threat of armored warfare. As a result, the Marine Corps determined that it must be able to deploy its M60 tanks rapidly as part of its crisis reponse package. Congress approved the Marine Corps' request to create a maritime prepositioning fleet. Work on the MPF program began in earnest 1979.[12] Though SWA was the initial focus of the RDF it eventually evolved as a rapid reaction force that was capable of conducting global crisis response. In 1983 the Military Sealift Command (MSC) leased thirteen ships and formed them into three Maritime prepositioned squadrons (MPSRONs) to meet the global challenge. By 1986 the Marine Corps' three MPSRONs were operational.[13]

The Army and Air Force re-established afloat prepositioning during the mid-1980s along the same lines as the Army's Vietnam era afloat prepositioning program.[14] Army and Air Force prepositioning afloat during this period contained only critical classes of supplies such as ammunition and sustainment items. This program like the Marine Corps' MPF later proved extremely valuable during Operation Desert Storm.[15]

**SUMMARY.**

Prepositioning has proved to be a valuable instrument in meeting the Nation's strategic mobility challenges. The elements of the strategic mobility triad (sealift, airlift, and prepositioning) each has its own strengths and weakness. Prepositioning bridges the gap between airlift (speed but lack of cargo capacity) and sealift (cargo capacity but lack of speed). Prepositioned assets are based on land or on sea depending upon the intended use and the perceived threat. Prepositioning has proved extremely effective

extremely effective whether supporting rapid deployment to Europe (land based, known threat) or supporting power projection in response to regional crisis (maritime, uncertain threat).

During the Cold War the Nation's strategic main effort was Europe. The RDF while extremely important was still considered an economy of force mission. The signing of the Conventional Forces Europe (CFE) treaty in 1989, and the demise of the Warsaw Pact, signaled a shift in the main effort. The main effort shifted from the threat of bi-polar global war to one of regional conflicts. The economic strain of the Cold War inflicted a serious toll on both super powers' economies. Budgetary constraints coupled with the lack of a well-defined threat prompted the Congress to seek to draw down the military and to redeploy forward based units. The United States could no longer afford to maintain a large forward deployed Army. Congress mandated that the Army once again become primarily a Continental Army. Suddenly power projection was the only game in town.

## CHAPTER III -- FROM FORWARD DEFENSE TO POWER PROJECTION: RETURN OF THE CONTINENTAL ARMY

Changes in the threat, mission, and disposition of forces coupled with fiscal realities forced the Bush administration to shift from a strategy of forward defense to one of power projection. President Bush, speaking at the Aspen Institute in Aspen, Colorado, on August 2, 1990, outlined a new National Defense Strategy predicated on the threat of regional contingencies versus containment. He based the new strategy on four key principles: strategic deterrence and defense; forward presence; crisis response; and reconstitution.[16] In addressing the new threat President Bush stated[17]

> We must focus on rapid response. ... In an era when threats may emerge with little or no warning, our ability to defend our interests will depend on our speed and agility. And we will need forces that give us a global reach. No amount of political change will alter the geographic fact that we are separated from many of our most important allies and interest by thousands of miles of water ... A new emphasis on flexibility and versatility must be out guide.
>
> President George Bush
> Aspen Institute, Aspen, CO

The same day, Iraq invaded Kuwait. Though the military was caught in the middle of force reductions, Desert Storm was a tremendous success for the United States Armed Forces. Of particular note was the performance of the Marine Corps's MPF.

Following the Persian Gulf War, the pace of down sizing and retrenchment on the Continent quickened for the United States Army and Air Force. The Army in 1989 had forty-two percent (or roughly 323,400) of its 770,000 active force forward deployed. After a rapid draw-down in Europe and sharp force reductions, the Army currently has only 26% of its force of 495,000 forward deployed.[18]

The Army's role in National power projection is force projection. Force projection "is the demonstrated ability to alert rapidly, mobilize, deploy, and operate anywhere in the world."[19] The Army cannot perform missions of power projection and crisis response without strategic lift provided by the other services.

The Persian Gulf War demonstrated, to military planners, the tremendous capability of the Marine Corps' Maritime Prepositioning Squadrons. However, after action reviews indicate, had Iraq continued its attack into Saudi Arabia during the first two weeks, US land forces, even with the Marine Corps' Maritime Prepositioning Squadrons, may not have been capable of withstanding an armored assault by Iraq. Desert Storm lessons learned identified a need for the early deployment of an armor heavy enabling force into theater. During Desert Shield the deployment of heavy forces required considerably longer than planned. By 12 September 1990, CENTCOM had less than one third of planned Army armor equipment in theater.[20] Desert Storm lessons learned indicate that the United States did not have a credible defensive force on the ground until mid-November. This was largely due to the lack of sufficient armor heavy forces and logistical limitations.[21]

Professors Paul Holman and Tim Sommes of the Naval War College in addressing future conventional force planning, argue that a key lesson learned from Desert Storm is that the proliferation of lethal, high technology, light and heavy weapon systems is a reality. Their assessment finds that any future war will likely be a highly intensive conflict waged by a combination of light and heavy ground forces. They conclude that land component force structure planning should focus on high-tech

light and heavy forces with enhanced strategic response time achieved by improved strategic mobility.[22]

The ability to introduce heavy forces and logistical support into a theater of operation faster, is a sequencing problem that, hinges on being able to achieve the right mix of strategic airlift, sealift, and prepositioning. Changes in the threat, fiscal realities, force disposition, and military strategy forced the Bush administration to shift from a strategy of forward defense to power projection. The revised strategy presented new challenges specifically for the Army. The Army like the Marine Corps, must be capable of projecting credible combat power in response to regional crisis. What is credible? It depends upon the threat and the situation. Many of the existing regional threats include large armor forces signifying that the Army could no longer handle crisis response with just light forces.

The Army must be capable of projecting decisive combat to include a heavy sustainable force. Desert Storm lessons learned identified early sustainability as a critical shortfall for the Army. The longer the logistics pipe-line the greater the time required to move resources to the other end. Shorten the distance required and you shorten the time required. Prepositioning is the means to shorten-the pipe line. Land based prepositioning offers the fastest response time. However, equipment must be positioned where you are going to use it. The Joint Chiefs of Staff and the Army started reexamining prepositioning options for the Army paying particular attention to the Marine Corps success with maritime prepositioning.

In April 1991, the Army Chief of Staff briefed Congress on the Army's plan for regional crisis response. Congress approved the plan, which included a prepositioned heavy brigade afloat. The Congressionally approved standard force flow mandates:

> The lead brigade (airborne or light infantry) will be on the ground by C+4. The 7th transportation group will arrive at the same time with necessary equipment to open air and sea ports. Two heavy divisions (sealift) arrive from CONUS by C+30. The CINC chooses the mix: armored, mechanized, air assault. The full corps (Five divisions and a Corps Support Command (COSCOM) closed by C+75. A fully supported heavy combat brigade with sufficient supplies to sustain the corps until lines of communication are established, must be prepositioned afloat.[23]

**NATIONAL MILITARY STRATEGY (NMS).**

General Colin L. Powell, the Chairman of the Joint Chiefs of Staff, outlined in January 1992, a new National Military Strategy (NMS) based on the NSS. At the center of the NMS was a national contingency force concept[24]. The Continental United States based contingency force included an Army Corps, seven Air Force fighter wings, and a Marine Expeditionary Force (MEF). Naval carrier battle group involvement was not detailed but was alluded to. The contingency force supports all theaters. CINCs have the option of using assigned forces, forces from the Continental based contingency force, special operations forces (SOF) or a combination of them.[25]

The Army provides to the contingency force a Corps consisting of up to five divisions and its headquarters. The Corps is tailorable, sustainable, and has an airborne vertical forced entry capability. The five divisions in the contingency corps include one airborne division, one air assault division, one light infantry division and two heavy divisions.

**MOBILITY REQUIREMENTS STUDY.**

The new NSS and NMS mandated that the Army be able to deploy a full corps in 75 days, almost half the time it took during Operation Desert Shield/Storm (ODS). Lessons learned from ODS indicated that there were already significant problems with our strategic mobility. The combination of Desert Storm lessons learned, force structure reductions and the redispositioning of ground and air forces state side prompted the Congress to task the Joint Chiefs of Staff and the Department of Defense to conduct a study to determine the nation's future strategic mobility requirements. This study became known as the Mobility Requirements Study (MRS). The goal of the study was to develop an integrated strategic mobility plan for the Armed Forces consistent with the National Security Strategy (NSS).

The NMS's contingency force requirements, particularly, those of the Army's contingency corps were a driving factor in the MRS. The study conducted 90 different war games using various regional contingencies covering the entire the spectrum of conflict. It attempted to minimize risk using factors of time (early risk, late risk), cost (based upon current budgets, medium cost alternatives and high to minimize risk), and support.

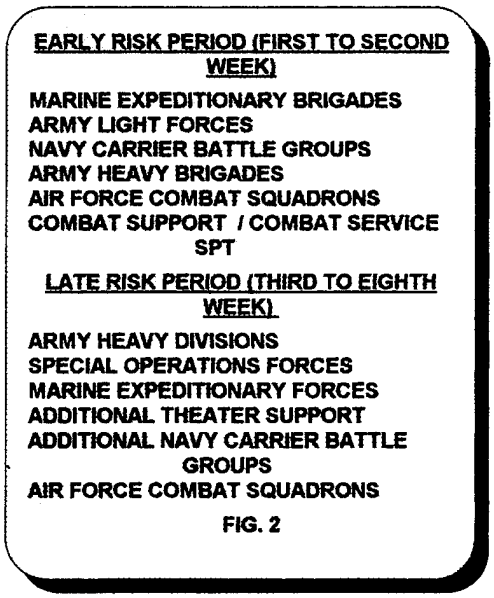


FIG. 2

The scenarios included contingency operations in Southwest Asia, Asia, Korea, Europe and elsewhere.[26] The Desert Storm scenario, using President Bush's base force, was

considered the worst case scenario. The board decided that the level of risk they were willing to accept in this scenario was medium confidence with medium cost. According to the board, the use of a prepositioned heavy brigade afloat with a theater entry package would achieve acceptable risk and cost levels. The heavy brigade had to be operational by C+14 and be capable of providing moderate support. The study concluded that an Army theater sustainment package would enhance the effectiveness of all forces deployed in theater.[27]

The MRS recommended the acquisition (by the Navy) of eight Large Medium Speed Roll-on-roll-off (LMSRs) ships, and two container ships for the Army's prepositioned heavy brigade afloat, and eleven LMSRs to support the Army's contingency corps' surge (deployment by sea of two heavy divisions by C+30). In addition, the board dedicated eight Fast Sealift Ships (FSSs) already in service with the Military Sealift Command (MSC) to support Army surge. The Ready Reserve Fleet (RRF) is to expand from 96 to 140 ships by FY 97. The MRS mandate specifies that 36 of the 140 ships must be RO/ROs. The RRF provided the Army eight Roll-on-Roll-offs (RO/ROs) until the eight LMSRs under construction by the Navy are ready.[28]

**REGIONAL PREPOSITIONING.**

The MRS and the Bottom-Up Review (BUR) determined that the Army could no longer focus its prepositioned efforts in one primary area (Europe). The Army must be equally ready to respond to threats in Europe, Southwest Asia, and Korea. The Army now has five regional sites. The Army designated its new sites AWR-1 through AWR-5 (Army War Reserve). APA is designated AWR-3. It is a critical part of the regional

prepositioning plan. APA is used as a swing set of POMCUS. It is slated against both Southwest Asia and Korea. APA enables the Army to project a heavy combat force into Southwest Asia, Korea or other areas. APA provides an enabling force for Southwest Asia and a reinforcing capability for Korea. APA allows for the flexibility of repositioning assets to strengthen any theater of operations with a heavy brigade and a heavy support package. It can be used as an enabling force where light forces have started a buildup or as a reinforcing brigade to a more mature theater of operations. It offers a dynamic capability across the spectrum of conflict from high intensity to operations other than war. Regional prepositioning is a critical enabling tool that allows the military to span the void between strategic mobility shortfalls and power projection requirements. Note the Marines use of land based prepositioning in Norway due to geography and a clearly defined threat and mission.

| ARMY GLOBAL PREPOSITIONING STRATEGY FOR REGIONAL CONTINGENCIES | | |
|---|---|---|
| REGION | LAND PREPO BDE SETS | AFLOAT PREPO BDE SETS |
| SOUTHWEST ASIA | 2 USA (AWR-5) | 1 USA (AWR-3) *<br>1 USMC (MPSRON -2)** |
| PACIFIC | 1 USA (AWR-4) | 1 USA (AWR-3)*<br>1 USMC (MPSRON -3)** |
| EUROPE | 5 USA (AWR-2)<br>1 USMC (NORWAY) | 1 USMC (MPSRON -1)** |
| * AWR-3 (APA) IS A SWING SET BETWEEN SWA AND KOREA<br>** MPSRONs MAY BE DEPLOYED SINGULARLY OR COLLECTIVELY<br>NOTE: AWR-1 IS CONUS BASED SUSTAINMENT STOCKS | | |

table 1

## CHAPTER IV -- APA VERSUS MPF -- MEANS VERSUS ROLES -- THE BIG PICTURE

Chapter three clearly demonstrates that prepositioning is a means to enhance strategic mobility -- merely a method of deployment. Prepositioning in effect reduces time and space requirements for deployment to a theater of operation. It decreases the early demand for strategic air and sealift resources in a contingency and permits troops and equipment to link up expeditiously. Lt. Col., Paul Wisniewski, USMC, in his article "Dueling Prepos" asserts that the argument over duplication of effort between MPF and APA is "a preoccupation with means rather than ends."[29] He identifies the following similarities between MPF and APA:

- Both use the same means (maritime prepositioning ships);
- Both rapidly deploy forces into a theater;
- Both reinforce forward forces or introduce forces; and
- Both support what some argue has become two armies or two marine corps.[30]

Numerous other similarities exist between the two. The following is but a few of the more critical:

- Both are JLOTS capable (Joint Logistics Over-The-Shore);
- Both are lethal, sustainable, and expansible;
- Both can be used as flexible deterrent options (FDOs);
- Both require a secure port and airfield facility;
- Both enhance a CINCs operational agility; and
- Both are modular in design for use across the spectrum of military operations.

Over the past couple of years a plethora of articles has debated what the real difference is between the two. In addressing this issue, Lt. Col. Wisniewski provides a concise and insightful answer: "largely the roles they serve."[31] He points out that they are complementary "as long as they support a division of labor between the two services." [32] This "division of labor" or roles and missions of the Army and the Marine

Corps is directed by the JCS in Joint Publication 2.0, the Unified Action Armed Forces (UNAAF).

Since their inceptions in 1775 the Army and the Marine Corps have both been charged with the responsibility to develop and maintain the capability to fight on land, the Army to prosecute land campaigns, the Marines to support naval campaigns. That is the "division of labor". The Army as the Nation's primary land force must be capable of fighting and winning a sustained land war, either on the Continent or on foreign soil. The Marine Corps is charged with primarily fighting on land, in the littoral area, in support of and to facilitate naval campaigns. The history of the two services is replete with examples where each has had to fight in the others role due to the nature of the particular war. Since both fight on the land it is natural that there are some overlapping capabilities.

According to the Secretary of Defense's Annual Briefing to the President and Congress the roles and missions of the Army and the Marines can be simplified as follows:

> The Army and Marine Corps provide land forces capable of responding to any contingency. The Army maintains forces for power projection and sustained military operations on land, while the Marine Corps, as part of the nation's maritime forces, contributes expeditionary forces for power projection from the sea in support of naval campaigns. Additionally, the Marine Corps supports the Army as required in land campaigns. These complementary capabilities provide a range of options.[33]

Technology has change the means available to the two to prosecute their particular brand of land warfare. In 1775 both were light forces. The only difference was sustainment capability. The Continental Army fought a sustained land locked campaign while Marines debarked to execute rapid raids on British forts and ports.

New technological developments such as the jeep and the tank were integrated into each service. During the years prior to World War II in a quest to improve the means to wage their particular brand of war the Marines developed the amphibious assault craft, while the Army continued to develop the tank. Over the years both services have undergone numerous changes to meet the Nation's strategic military needs. FMFM 1-2 in addressing change in the Corps states that "Change must be based on the Nation's strategic needs (insofar as they can be foreseen), the Marine Corps' statutory roles and missions, and recognition of the roles of the other military services."[34] It follows that the same case applies to the Army. It must change to meet the strategic challenge it has been given by Congress, the President, and the warfighting CINCs, of power projection and crisis response. Maritime prepositioning is a means to project force in a timely manner. It can be moved to the area, as a threat develops, thus reducing the distance that must be traveled by early entry forces and their required logistical support packages. Maritime prepositioning is a means by which both the Marine Corps and the Army can meet their specified mission to project power onto foreign soil. In an effort to understand their respective capabilities to project power, lets examine each at the macro-level.

**MPF.**

MPF enables the Corps to be a force-in-readiness. Its intended purpose is to provide expeditiously reinforcement forces to a forward deployed Marine Air-Ground Task Force (MAGTF), or introduce forces into a non-hostile environment such as humanitarian assistance operations.

The Marine Corps currently has three Maritime Prepositioned Squadrons (MPSRON). These squadrons are strategically based to give the "Corps" a global response capability: MPSRON-1 currently based in the Atlantic is being moved to the Mediterranean; MPSRON-2 is anchored at Diego Garcia; and MPSRON-3 operates out of the Guam - Siapan Area.[35] These thirteen ships are civilian owned and operated under a twenty-five year lease by the Military Sealift Command (MSC). These squadrons deliver quick strategic crisis response to regional contingencies.

MPF offers unique employment flexibility. Its modular force can provide the theater CINCs with adaptive force packages that are flexible enough to adapt to a broad range of missions. The Marine Corps employs a modular force design across the board. There are four MPF modules: Module - 1, is a Marine Expeditionary Unit (MEU), force size 2,552, with one prepositioning ship; Module - 2 is a low intensity conflict (LIC) Marine Expeditionary Brigade (MEB), force size 10,774, 3 prepositioning ships; Module - 3 is a LIC MEB, force size 10,774, it consist of two prepositioning ships with an Amphibious Ready Group (ARG); Module - 4 is a full up MEB, force size 16,643, it can consist of four (MPSRON 1 & 3) or five (MPSRON 2) prepositioning ships depending upon which MPSRON is used.[36]

Each MPSRON currently consist of 30 M1A1 tanks (soon to be 58 again), 25 light armored vehicles (LAV), 109 amphibious assault vehicles (AAV), 30 155 mm towed howitzers, 129 HMMWVs (72 with TOW), 8 Hawk air defense missile systems, and 45 Stingers. 16,500 personnel marry up with the equipment. Each MPSRON has four elements: Command Element (CE); Ground Combat Element (GCE); Aviation

Combat Element (ACE) and the Combat Service Support Element (CSSE). When the ACE is fully operation it includes 61 fixed wing and 63 rotary-wing aircraft. The MPSRON requires 249 strategic airlift sorties to deploy (including rotary-wing aircraft) and is self sustainable for up to 30 days.[37]

When MPF deploys, It can be deployed one MPSRONs at a time. It can have three separate functioning MPSRONs at once. When all three MPSRONs are deployed together it provides a warfighting CINC a tremendous slice of the Marine Corps' combat power. APA while similar is also quite different.

**APA.**

APA was designed to correct the Army's identified armor and logistical support shortfalls during the early risk window. "The intended purpose of APA is to facilitate the Army's conduct of land warfare."[38] Former Chief of Staff of the Army, General Carl Vuono in 1991 listed four essential qualities that the Army had to possess to insure national security. These qualities are versatility, deployability, lethality, and expansibility.[39] APA is designed to link up with a light or airborne brigade, or MPF, then to expand to one light division and two heavy divisions by C+30 and have a Corps on the ground by C+75. Like MPF, after APA's ships are off-loaded they can sortie to pick up other deploying units. The heavy brigade afloat is defined in the Army Strategic Mobility Program (ASMP) as a 2X2 heavy brigade equivalent.[40] Its prepositioned combat equipment can be configured either as a balanced heavy brigade of two M1A1 Abrams tank battalions and two M2A2 Bradley infantry battalions or as an armored cavalry regiment (ACR). It comes complete with fifteen days of supplies for the heavy

brigade and its forward support battalion. Additional combat power and combat multipliers include a multiple launch rocket system (MLRS) battery, an M109 self-propelled artillery battalion, a patriot missile battery, and a combat engineer battalion.

The Army is responsible not only for its own combat service support (CSS), but also the provision of common service support to all armed forces in theater.[41] APA gives the Army a critically needed, force projection logistics capability that it lacked during these first two weeks of the Gulf War. In addition to the brigade's separate support battalion, there are divisional, corps, and theater level combat service support (CSS) elements. Each is equipped with 15 days of supplies. Army ships provide supplies for all five deploying divisions through C+30.

Operation Restore Hope provided the Army's maritime prepositioning program its first hands-on experience with maritime prepositioning. The Army encountered significant problems during the operation. The Army was unable to off-load their field hospital in Somalia. Planners did not anticipate several problems they encountered with the port and infrastructure.

As a result of lessons learned, the Army Chief of Staff directed that the Army adopt a modular concept similar to that which the Marine Corps established after ODS. The Army added a second Heavy Lift PREPO Ship (HLPS) and an Auxiliary Crane ship (T-ACS) to enhance port opening operations. Significant improvements were made in the Army's Joint Logistics Over Shore (JLOTS) Capabilities. 7th Transportation Group (active duty) from Fort Eustis, Virginia, is responsible for cargo handling and

off-loading. The group has four service terminal companies and two cargo transfer companies. This ensures that APA can be off-loaded in a timely manner.

APA is anchored at Diego Garcia in the Indian Ocean and Guam. APA like MPF is under the operational control (OPCON) of unified combatant commander but under the administrative control (ADCON) of the Military Sealift Command (MSC). The United States Army Materiel Command (USAMC) is responsible for administrative direction, support, and control of equipment and supplies. When APA is alerted, the initiation directive will specify the command relationships by phases. The APA phase of the operation will terminate once the brigade's personnel link up with their equipment and the brigade commander and the port support activity agree.[42]

**SUMMARY.**

MPF and APA are similar, but different tools in the kit bag of the operational planner. Maritime prepositioning is a means to enhance operational agility. The next chapter provides a closer look at operational art and campaign design in an effort to discover why MPF and APA are complementary vice redundant.

## CHAPTER V -- THE OPERATIONAL LEVEL OF WAR -- PLANNING AND CAMPAIGN DESIGN

"The operational level of war governs deployment of forces, commitment or withdrawal of forces, and sequencing."[43] It provides the linkage between strategic aims and tactical application. The Joint Strategic Capabilities Plan (JSCP) task the CINCs to develop a theater plan that uses adaptive planning principles that span the spectrum of military operations. Adaptive planning starts at the low end with flexible deterrent options (FDOs) and increases gradually across the spectrum until all the instruments of war are employed.[44]

The purpose of FDOs is to provide decision makers with carefully crafted, incremental levels of measured response. Planners design FDOs to dissuade possible adversaries from aggression or escalation. It is critical to have FDOs in order to preclude a rush to escalation due to the lack of other options. The intent is to avoid an "all" or "nothing" situation. Such was the case in World War I, when Moltke prematurely triggered the Scheillfen plan generating a series of unchecked events that plummeted the world into war. "FDOs are deterrence -- oriented and carefully tailored to avoid the response dilemma of too much too soon or too little too late."[45]

Both MPF and APA are excellent instruments for constructing FDOs. They can be used in a wide range of FDO missions to include: presence, show of force, or demonstrations. The purpose of Maritime prepositioning operations is the rapid establishment of a tailored force package ashore, ready to conduct combat operations.

Military FDOs are meant to be used in conjunction with FDOs for the other instruments of national power.

The CINC and his staff functioning at the operational level furnish the linkage between national strategic objectives and tactical operations. History demonstrates that all planners are not created equal. It takes a commander or planner possessing a unique blend of science and skill to integrate and synchronize strategic aims into operational plans that translate to success on the battlefield. That is the ability of the operational artist.

**OPERATIONAL ART.**

The operational artist has both feet firmly grounded in the science of war; but, operational art transcends science. While the scientist learns by trial or error and adheres to the rigidity of time proven methods, the artist has mastered his craft and is able to envision and design in simplicity what the technician fails to grasp.

Operational art translates strategic policy and objectives through the design of a theater strategy, linking strategic and operational objectives to tactical battles and engagements to achieve the strategic aim. As an artist is limited by the availability of only one pigment of paint, so is the operational artist without the full compliment of the joint team. FM 100-5 Operations defines operational art as:

> ...the skillful employment of military forces to attain strategic and/or operational objectives within a theater through the design, organization, integration, and conduct of theater strategies, campaigns, major operations, and battles.[46] (emphasis added)

Campaign planning is analogous to weaving a tapestry. In order to achieve the desired effect, the artist is asked to produce a tapestry that captures the vision of his

patron. The patron and the artist must decide what resources (funds or materials) are available, and if the artisan can produce the desired effects with the materials available. The artist must understand given the materials available what is possible and what is not. If the resources available can not produce the desired effect, the artisan must convince the patron to provide additional resources or adjust his desires to the reality of the threads available. Once the resources and the achievable end state match, the artist carefully lays out a design utilizing his limited resources. The pattern (plan) is made up of a series of smaller projects that enable the artist to weave the complete tapestry envisioned by his patron in an orderly manner.

The operational artist must determine how to accomplish the NMS's and CINC's desired end state. The planner designs the campaign plan in conjunction with the CINC. He lays a plan to include branches and sequels to achieve the strategic objective. In designing a campaign plan the commander and his planners must answer four questions:[47]

1. What military conditions must be produced in the theater of operations to achieve the strategic goal?

2. What sequence of actions is most likely to produce that condition?

3. How should the resources of the force be applied to produce that sequence of actions?

4. What is the likely cost or risk to the joint force in performing that sequence of operations.

The concept of operational design is key to understanding how the Army's afloat brigade enhances operational agility and why it is complementary to MPF vice redundant.

As part of the deliberate planning process at the operational level, CINCs identify force requirements to the JCS and the National Command Authority (NCA). The congress decides what to resource, then apportions funds to the services to meet the approved needs of the CINCs. The service chiefs are responsible for procuring the procurement of equipment, development of doctrine, and training and educating the force to meet the requirements identified by the warfighting CINCs.

Warfighting CINCs and operational planners use the adaptive planning concept to produce a catalog of options covering the spectrum of military operations that can be adapted to a crisis as it develops. The purpose is to tailor a response package that deters escalation and if deterrence fails has the flexibility to deal decisively with the threat.

**SEQUENCING OPERATIONS.**

A critical aspect of campaign design is to determine how to flow forces into a theater of operations and how to array the forces on the ground in the theater. The commander and his planning staff must carefully consider this problem. Factors to consider in early entry decisions include: force protection, political situations, geography, weather, visibility, enemy capabilities, type and amount of strategic lift available, time and distance to deploy, supportability, and follow-on operations to name a few. This list is by no means exhaustive.[48]

> CINCs determine the best sequence of major operations that achieve a tempo of operations to reach the desired objective. Commanders consider a variety of factors including geography, strategic lift, infrastructure, command structure, logistics, enemy capabilities and array, reinforcements, battle stance, and public opinion.[49]

As previously discussed, forces during the initial two weeks in an immature theater are extremely vulnerable. "Sequencing decisions for force projection operations of ground forces is complicated by a rapidly changing enemy situation."[50] The Commander and his staff must ensure that the course of actions considered for sequencing forces into theater are flexible enough to accommodate change. All resources available must be considered as a means to dominate battle space.[51]

There are two primary types of entry operations: one is forcible, an invasion; the second is a benign entry, we are invited. Forcible entries can fall into one of two categories opposed or unopposed. The operational planner has two primary options for this type of operation. One, he can plan an operation of sequential echelonment; or two, he can plan a simultaneous operation where multiple types of forces strike multiple targets at the same time. Operation Desert Storm/Shield (ODS) is considered by most to be a classic example of sequential operations while Operation Just Cause is usually cited as the text book example for simultaneous operations.

The complementary capabilities of the Nation's two land forces are critical for either type operation. Which type should the planner choose? It depends. The planning considerations cited above are critical considerations. In Desert Storm we were able to conduct a benign entry into Saudi Arabia and an echelonment of forces. Our enemy was strong and our initial position was weak. The same factors that drove us to conduct a massive build up in ODS were the same factors that drove the planners

to conduct sequential operations. Sequential operations are normally easier to support and require fewer assets initially than simultaneous operations.

**SEQUENTIAL OPERATIONS.**

During ODS the lead elements of the 82nd Airborne's ready brigade were on the ground in Saudi Arabia within 16 hours. It drew President Bush's line in the sand. With a MAGTF and carrier battle group off the coast the Army and the Air Force were deployed to convey to Iraq that the United States was serious. The 82nd posed virtually little threat to Iraq either offensively or defensively. Within two weeks the Maine Corps MPF off-loaded its AAVs, LAVs and tanks. The sequential build up was under way. We graduated from a light infantry defense to a medium infantry defense. Logistical support for the 82nd was largely provided by the Navy and the Marine Corps. The Marine Expeditionary Force and the United States Air Force significantly improved the United States' initial abilities to defend Saudi Arabia.

The Marines and the 82nd Airborne worked together to strengthen the Saudi Arabian defenses. Together they secured the vital airports and seaports that facilitated the greatest buildup of military power since the invasion of Normandy. In reality, it is not known whether or not our lead elements actually deterred Saddam Hussein or whether his goal was always limited to an occupation of Kuwait. What is known is that the Army was not able to provide sufficient heavy equipment or CSS assets to present a credible defensive force until mid-November.

General Schwarzkoph, CINC CENTCOM, had to make a tough choice during the early crisis period between deploying combat forces or logistical support personnel and equipment. This was largely due to the Nation's limited strategic lift, especially those available during the early crisis period to move both combat forces and CSS assets into theater. APA is designed to help preclude a CINC from being faced with the same problem. It can make a significant difference in both defensive capabilities and sustainability during the early build up. APA couple with the MAGTF (MPF), the 82nd Airborne, and the Air Force could provide a great deal more combat power during the early risk period.

**SIMULTANEOUS OPERATIONS.**

Simultaneous operations are designed to take down multiple targets at the same time across the width and depth of the battlefield. In Panama the United States Armed Forces had an over-abundance of resources to conduct simultaneous operations. We enjoyed a tremendous advantage of resources across the board to include; detailed intelligence, strategic lift, combat power, technology, overwhelming combat power, multiple entry points by air and sea, and better trained and equipped forces than our adversaries. When the resources listed above are limited, it also tends to limit our ability to conduct simultaneous operations. Another classic example of simultaneous operations is the invasion of Normandy. The United States Armed Forces attacked from the air, land, and sea simultaneously or nearly simultaneously to seize, block, and destroy numerous targets at the same time. At Normandy like Panama we enjoyed a tremendous abundance of resources that facilitated our ability to conduct a

simultaneous operation. Sometimes the ability to conduct simultaneous operations may be the difference between victory and defeat.

A CINC responding to a regional contingency mission in the future could employ the synergism of the Marine Corps and the Army simultaneously. He could initiate an assault with a Marine over-the-horizon (OTH) assault utilizing the "Corps" new V22 helicopter and an airborne assault by the Army's Rangers or the 82nd Airborne. At the same time, he could launch from the sea a Marine amphibious assault landing. He could then quickly reinforce his initial combat elements with follow-on forces landing at secured airfields to link-up with MPF and APA. MPF and APA would land at secured seaports and immediately begin off-loading. MPF allows the CINC to deploy a MEF expeditiously into theater. APA enables the CINC to begin a rapid build up of Army forces in theater established upon a heavy division's lead brigade linking up with its equipment from APA and the theater sustainment package. MPF coupled with APA allows a CINC to flow medium and heavy forces promptly into a theater of operation. They deliver a robust capability to reinforce success enabling the CINC to dictate the tempo. APA like MPF significantly enhances a CINC's operational agility.

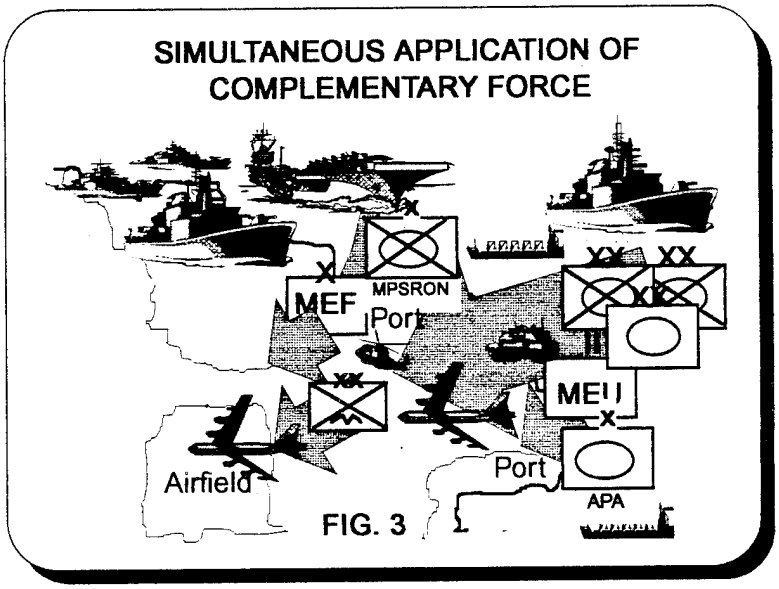


FIG. 3

The bottom line is that APA gives the campaign planner another specialized tool that is specially formulated to enhance the Nation's ability to project power in a timely manner. It enhances a CINC's operational agility through improved and enhanced strategic mobility, adaptive force packaging capabilities, and force sustainment options.

**SIX FUNDAMENTALS FOR STRATEGIC AND OPERATIONAL SECURITY.**

General Carl E. Vuono, former Chief of Staff of the United States Army, writing about the future of power projection operations cited what he termed four essential qualities our Nation's land forces must possess if we are going to retain our national security. His fundamentals for national security included: deployability, versatility, lethality, and expansibility. In consideration of the 1992 FM 100-5, Operations, I will add two more to this list. They are deterrence, and sustainability. What roles do MPF and APA play in these fundamentals of national and operational security?

**DETERRENCE.**

Creating and managing a deterrent perception is critical to the National Security Strategy (NSS) of the United States. Deterrence requires credibility. The credibility of the Armed Forces of the United States depends upon our strategic and operational agility.[52] One of the arguments for prepositioning has been it serves as a deterrent. While MPF was not a successful deterrent to the Persian Gulf War its strategic worth was clearly validated. The Army's POMCUS was an integral part of NATO's General Defense Plan (GDP). POMCUS alone was not considered a deterrence. NATO's deterrence was based upon combining the capabilities of forces on the ground and the time gained by prepositioning six heavy division's equipment in theater. The additional

capability of APA added to that of MPF and joint training exercises being conducted enhances the deterrence value of maritime prepositioning.

**DEPLOYABILITY.**

"Deployability contributes to both deterrence and defense."[53] Our armed forces' ability to deploy takes on greater consequence as they continue to shrink in size.[54] Warfighting CINCs determine deployment times as part of the deliberate planning process. The CINC determines what forces need to be deployed and when based upon his vision. APA accomplishes in part what MPF did for the Marine Corps. It significantly enhances the Army's ability to deploy heavy forces into theater with a viable support package. It is a critical part of the solutions proposed by the MRS concerning our Nation's strategic mobility problems. The Army's ability to deploy heavy forces quickly into a theater are not only critical for the Army but also for the Marines. The early threat may require as much heavy armor on the ground as we can possibly send. Often battles are won or lost during the initial stages. APA enhances our opening move.

**VERSATILITY.**

A CINC must have at his disposal forces that are able to meet a wide array of challenges. The pool of forces to draw from is significantly smaller than in the past. By the end of next year the United States Army will have drawn down from eighteen combat divisions to ten. The forces that are left must be able to respond to a broad range of challenges. The Army and the Marine Corps, each must be capable of conducting operations across the spectrum of military operations, from humanitarian

assistance to high intensity ground combat. Both APA and MPF are modular in design and are capable of the full range of military operations expected of conventional forces (within their respected roles). Both are tailorable forces that can adapt to meet the threat. MPF is more adaptive at the low to medium end of the scale. The Army and the Marine Corps are adept at working independently. However, each must improve its ability to work the other. The combined synergy of America's two land forces is now a requirement not a nicety.

**LETHALITY.**

A force must be capable of bringing to bear overwhelming combat power. "It is not enough to simply project power; that power must be capable of prevailing when deployed."[55] Planners must ensure that the force package they construct provides not only adequate force protection against known enemy capabilities but also the capability to exploit weakness and offset the enemy's strengths. The United States must deploy a lethal and capable force, if it's to be a deterrent. Realistic and demanding training enhances lethality. APA coupled with MPF results in a two-fold increase in the CINCs early window ground combat capabilities.

**EXPANSIBLE.**

Early entry forces must be designed to absorb follow on forces while affording them force protection and logistical support. Forces must be modular in design so they can be adapted to meet force projection challenges that span the spectrum of conflict. MPF enables the "Corps" to expand to a force of 31,000 personnel, 90 M1A1 tanks, 327 amphibious assault vehicles, 75 light armored vehicles, 183 fixed wing aircraft and

189 rotary wing aircraft within 30 days. APA enables the Army to position a heavy brigade on the ground within 14 days, a light division by C+ 15, two heavy divisions by C+30 and an entire five division corps to include the corps headquarters and the COSCOM on the ground operational not later than C+75. MPF and APA are fundamental to the way the Nation plans to expand its force in regional conflicts.

**SUSTAINABILITY.**

MPF has 60 days of supplies for an entire MEF. APA's theater support package contains sustainment packages will sustain the five division force through C+30 The incoming units arrive with enough resources to provide support out to C+75. At C+75 the contingency corps has on the ground a fully functional corps support command (COSCOM). The COSCOM are support the corps for an additional 60 days. APA significantly improves the Army's sustainability while reducing its dependence upon reserve component logisticians.

**SUMMARY.**

APA and MPF are specially designed tools for power projection. Each is an enabling force that is deployable, versatile, lethal, expansible and sustainable. The intended purpose of APA is to facilitate the rapid build-up a five division corps to fight sustained land combat. The purpose of MPF is to enable the Marine Corps to conduct and support naval expeditionary operations in the littorals. Prepositioning is merely a means for deployment. We have looked at both at the MACRO level. Planners needs to have a more detailed grasp of the capabilities and limitations of APA and MPF in order to understand which tool is the right tool for a particular job.

## CHAPTER VI -- ANALYSIS BY COMBAT FUNCTIONAL AREA

CINCs and operational planners need to understand some of the major capabilities and limitations of APA and MPF. The Army's seven combat functional areas (intelligence, maneuver, fire support, air defense, mobility and survivability, command and control, and combat service support) provides a means for comparison at the MICRO level.[56] The functional areas are often called combat multipliers. Integrated properly they have a synergistic effect. The author endeavors to stay out of the weeds while addressing important differences between the two. "The devil is in the details."[57] ($C^2$ will not be evaluated due to the length limitations of the paper)

### INTELLIGENCE.

The focus on intelligence between the Army and the Marine Corps while similar is somewhat different. The Army seems to have a thirst for detailed intelligence. Intelligence in the Army is a quest to reduce uncertainty. In the past, the Army has normally fought against a known threat. This has enabled the Army to develop very detailed threat profiles that it integrates into planning at all levels. The Marine Corps on the other had has historically been called upon to fight on short notice against regional powers that have a less developed order of battle profile. The Marines typically deploy into a situation provided with little intelligence. Once they are on the ground they collect their own intelligence and disseminate it as quickly as possible. Army plans are based upon detailed intelligence while Marine Corps planning is based upon flexibility and combat power. The Army recognizes that when it comes to force projection, in a crisis response role, it has the same intelligence limitations that the

Corps has historically faced. Both must rely on higher levels to include joint and agency intelligence.[58]

The Army's heavy brigade enjoys a significant advantage over MPF in its night acquisition systems. The Army's Bradleys have integrated thermal sights that rival that of the M1A1. The Army also enjoys a much higher individual night sight to soldier ratio than the Marine Corps does.[59]

One intelligence advantage MPF does enjoy over APA is its organic air. This allows in-flight information to be passed back to the commander in real time. While APA's aviation brigade is responsive there is not the same seamlessness as the MAGTF enjoys. In a littoral environment APA and MPF both will rely on Navy intelligence. The MAGTF (MPF) enjoys a well established and practiced working relationship with Navy intelligence that the Army heavy brigade does not.

**MANEUVER.**

Tactical maneuver is conducted to achieve operational aims. Maneuver is not merely movement relative to the enemy. "By maneuver, friendly forces gain the ability to destroy the enemy of hinder his movement through the direct application or indirect application of lethal power."[60] This section examines the forces and equipment available for the conduct of maneuver. The Army considers its combat aviation brigade as a maneuver arm while the Marine Corps' views the ACE as an element of fire support. In this analysis I will examine both in the context of the functional area of fire support.

Maneuver does not only include high speed armor maneuver but also the more deliberate maneuver of light and motorized infantry. MPF is designed as a light to medium force. In this role it is extremely flexible and lethal. The MPF enjoys an enormous advantage over APA in infantry. If the two infantry battalions from the APA are at 100% strength for dismounted infantry they can still only field a total of 432 dismounts. Each Bradley carries no more than six dismounts. While the Bradley offers greater mobility, firepower, and night vision capability, each Marine amphibious assault vehicle (AAVs) carries up to twenty dismounts. The MPF (including all three MPSRONs) has a total of 327 giving the commander the capability to move 6, 327 infantrymen to a distant objective under the protection of light armor. The AAV is highly mobile packs a punch with its electronic turret armed with sight controlled .50 caliber machine gun and MARK-19 grenade launcher. In addition, MPF has a total of 387 lightly armored HMMWVs, 216 of them have TOW anti-armor systems mounted. This combination of infantry, AAVs, and armored TOW HMMWVs give the MPF excellent medium infantry capabilities.

One of the drawbacks of the AAV is that it is not able to keep up with the M1A1 tank cross country. Each division has two tank battalions that function as force providers. Normally the tank battalions are split apart. One tank company is normally assigned to each infantry regiment. The Marine Corps historically has used the tank as an infantry support weapon. However, in the 1980s the Marines additionally trained their tank battalions to fight as a full up tank battalions using the Army's FM 71-2 as its doctrinal base. Desert Storm demonstrated that Marine Corps tankerss are adept at

fighting in battalion strength. Ashore the Marine Corps AAV companies are literally battlefield taxis. AAV companies and battalions are made up of basically the AAV crews and a chain of command. Infantry units link-up with the AAVs to become mechanized infantry.[61]

APA heavy brigades train as a combined arms team basically as a fixed unit to include it armor battalions, mechanized infantry battalions, field artillery battalion, ADA company, and its forward support battalion. They train and fight as battalion task force teams and as a brigade combat team on a regular basis. The APA offers a ground attack force with a robust sustainment package. It is designed for high speed armor warfare on open rolling terrain. Each battalion from the infantry to the artillery is designed for armor warfare. The self propelled howitzers have armor protection for crews and ammunition. However, APA has significant draw backs for maneuvering in urban areas or wooded areas in that it offers little in the way of dismounted infantry to clear woodlines, chokepoints, buildings, or man check points.

**FIRE SUPPORT.**

The combined arms team in the Marine Corps is built around its aviation. Each of the three MPSRONs comes with its own "pocket air force" that includes 61 fixed wing and 63 rotary wing aircraft. When you combine all three MPSRONs into the total MPF it is one of the most powerful air forces on the planet. While APA links up early with Navy, Air Force, and its combat aviation brigade it does not enjoy the same integrated relationship that the MAGTF does. Marine Corps close air support is considered the

considered the best in the world. The Marines also enjoy a significant advantage in the coordination and employment of Naval air in support of their operations.

In the area of field artillery the MPF has a total of 90 towed 155 howitzers to APA's 24 self-propelled howitzers and nine MLRSs (a battery). The MPF enjoys a quantitative advantage. However, its M198 Howitzers are not very survivable or maneuvable. They are better suited for defensive support, but when dug in they become subject to counter-battery fire. The Army's self-propelled howitzers, armored ammunition carriers, and MLRS (ATACMS capable) battery is better suited to support an armored brigade in the attack. The MPF has a significant advantage in the number of organic mortars again giving MPF a decided advantage over APA for operations in urban areas.

**AIR DEFENSE.**

Each has significant Air defense protection. MPF has a total of 24 HAWK missile systems, and 135 stingers. The HAWK while an old system it has gone through three upgrades. The system has a small footprint (200 x 200 meters) and a range of 40 KMs that makes it a formidable weapons system. It is subject to anti-radiation jamming and has a very limited ballistic missile capability. Other limitations to HAWK include smoke signature after launch, an electronic signature and an infra-red signature. MPFs 135 stingers are dismounted. The MPF stinger teams are tied into an air warning net. Another unique air defense capability enjoyed by the MPF is its air to air capability from the ACE (Air Combat Element).

APA has a Patriot battery that is flown in to link up with APA when deployed. Patriot has a planning range of 50 KMs for aircraft. Its planning factors for theater ballistic missile defense is classified. It can engage multiple aircraft simultaneously, has an all weather capability and is operationally effective even in an intense ECM environment. APA's Patriot system requires over 100 sorties to transport. Another consideration in the employment of Patriot is it requires an area 1 KM x 1 KM for emplacement and dedicated troops to protect the system. Patriot does afford a critical theater ballistic missile defense that MPF does not have.

APA has ten avenger stingers and ten Bradley Stingers. (BSFV) The avenger has an all weather, day or night capability. The crew on the BSFVs must dismount to use the system. BSFV's 25 mm cannon is extremely effective against rotary wing aircraft. Additionally, the Army's National Training Center (NTC) has proved that the M1A1 tank and the Bradley fighting vehicles are both extremely effective against rotary winged aircraft.

**MOBILITY / SURVIVABILITY.**

The Marine Corps has a significant capability to dig in. One of the "Corps" biggest lessons learned from ODS was its lack of ability to conduct an in-stride breach. Major Craig Tucker, USMC, in his monograph, "Band of Brothers" presents an excellent discussion of how the Marine Corps and the Tiger Brigade worked together to develop breaching doctrine and terminology during ODS.[62] APA has significant breaching assets and barrier materials. The heavy brigade is well equipped and suited for

conducting breaching operations. The number of breaches the brigade conducts is dependent upon the complexity of the obstacles.

**COMBAT SERVICE SUPPORT.**

Marines describe their logistical support as "Spartan". The Marines published doctrine states that due to its expeditionary nature, an austere logistical support environment is the "norm". While austere, the Marines logistical support system is dynamic. It provides excellent support to the MAGTF in the littorals. However, the further the Marines' logistic system moves from the beach the less dynamic it is. The Marines are significantly limited in their ability to conduct land warfare on the interior by a lack of Heavy Equipment Transports (HETs). Additional limitations for the Marines include a lack of sufficient truck assets to support their requirements for fuel, ammunition and other classes of supplies, for this they rely on the Army.

APA provides more HETs on the ground than the Army had in theater for ODS by C+180. APA provides critical sustainment capabilities the Army needs to conduct sustained land combat, from port -- forward. It is the "fix" for the Army's identified logistical shortfall during the critical early entry period as identified in lessons learned from Desert Storm. MPF provides direct support to the Marines. APA provides direct support to the Army and supporting logistical support to the Marines.

**SUMMARY.**

This analysis of APA and MPF utilizing the Army's seven combat functional areas establish that APA and MPF are complementary and not redundant. Each is crucial to its parent service's ability to deploy its forces into a theater of operation.

Each is a flexible, distinct tool that offers a group of unique options to a warfighting CINC. By understanding the strengths and limitations of each the operational planner can select one or the other or a combination of the two. Together they enhance the flexibility of the CINC to fit the force to the threat.

## CHAPTER VII -- CONCLUSIONS

The preceding discussion leads to several conclusions concerning the need for APA in light of the preexistence of MPF. The NSS, NMS, MRS, and BUR all mandate that today's Army must be capable of crisis response across the spectrum of conflict. This includes heavy, sustained, land warfare. Desert Storm clearly revealed the Army's lack of ability to promptly deploy heavy, sustained force into an immature theater of operation. APA fills a critical gap in the Nation's ability to project power abroad to protect its vital interest The Army's heavy brigade afloat and its theater sustainment package are a critical piece of the MRS's plan to bolster our strategic mobility.

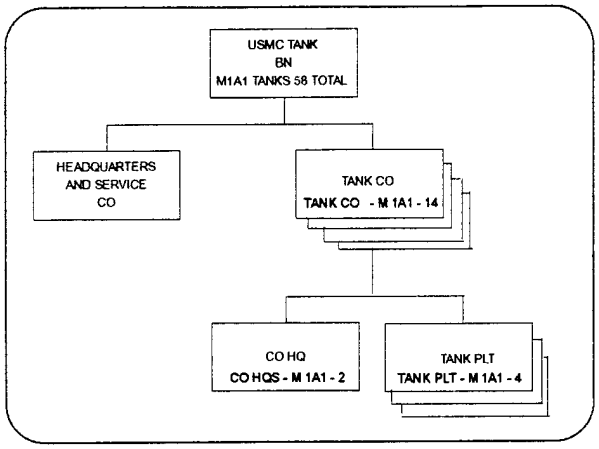
Prepositioning whether on the land or at sea merely serves as a means to improve deployment time into a theater. Prepositioning bridges the gaps that exist between strategic airlift and sealift. MPF and APA are specifically designed to support the power projection needs of the Nation and their particular service in fulfilling their historical roles and missions. MPF and APA are enabling forces. Both are deployable, versatile, lethal, expansible, and sustainable. However, their intended purposes are different. The purpose of MPF is to rapidly reinforce or introduce Marine forces into an area of operation to enable the "Corps" to conduct and support naval campaigns in the littorals. The intent of APA is to facilitate the rapid build-up of a five division, heavy Army corps with its COSCOM capable of conducting sustained land warfare. APA gives CINCs a rapid response, heavy capability that can be employed independently, as reinforcement, or an enabling force for follow-on heavy forces. APA is a critical enabling force for the Army to be able to project heavy forces to conduct sustain land warfare.

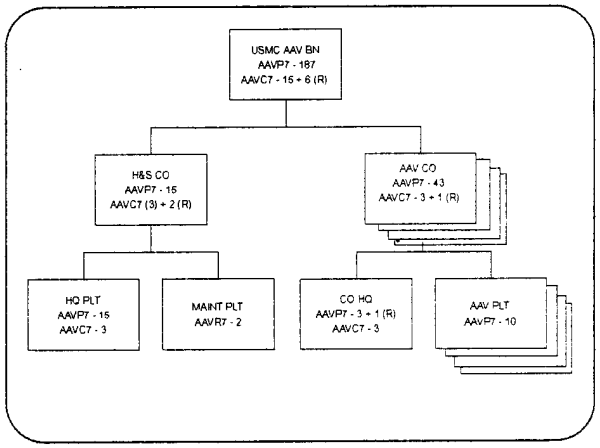
The nature of war has not changed but the threat has. Emerging threats necessitate that the Army as the Marine Corps moves to adaptable force packages. APA meets this criterion. It is intuitively obvious to even the most casual observer that APA is ambitious undertaking. It is full of challenges to overcome. Joint training exercises are paramount. APA is a small step in the right direction of meeting the strategic mobility challenges facing the nation.

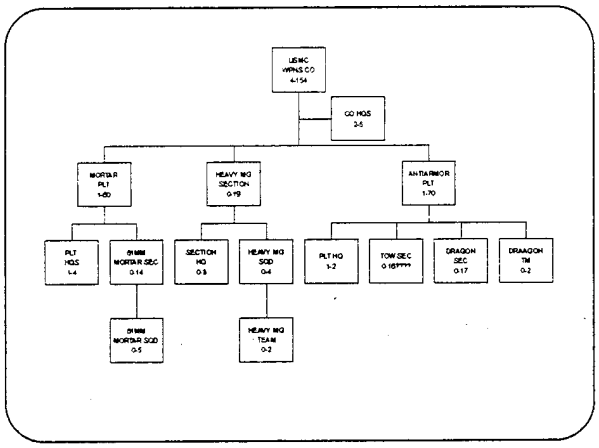
There are obvious similarities and capabilities. Both are maritime prepositioning programs of combat equipment that give their service a benign entry capability. Both provide flexibility and utility across the spectrum of conflict. While there are overlapping capabilities between MPF and APA, they are complementary not duplicative. Each is tailored to support the roles and mission of its service. Each is critical to the Nations ability to project power and respond to crisis.

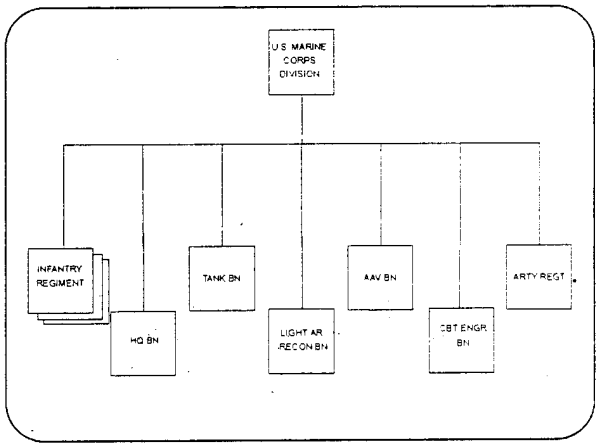
APA like MPF is a critical tool for the operational planner. Together they provide added possibilities for sequential or simultaneous operations. The combination of APA and MPF gives a CINC a catalog of options to mix based upon his METT-T assessment. APA provides for the Army ... from the sea a means to enhance operational agility.

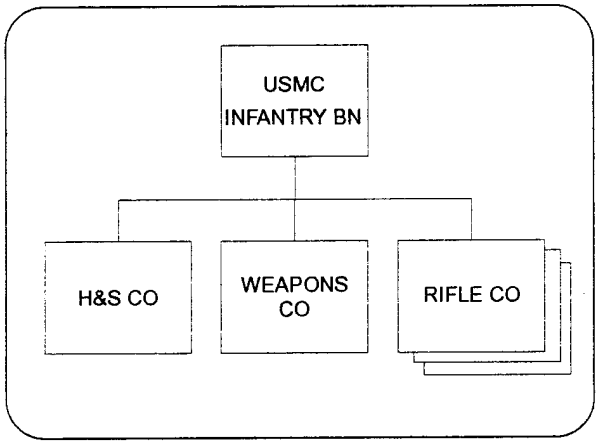
# APPENDIX A. MPF/ MARINE CORPS ORGANIZATION AND CAPABILITIES

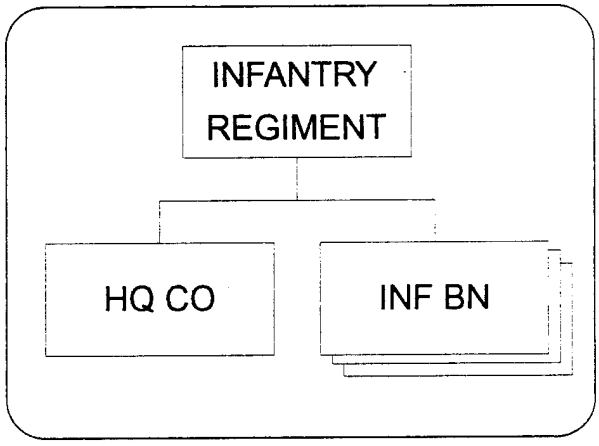




## APPENDIX A. MPF/ MARINE CORPS ORGANIZATION AND CAPABILITIES

| UNITED STATES MARINE CORPS' FIXED WINGED AIRCRAFT CAPABILITIES | |
|---|---|
| A-6E INTRUDER | 650 MPH / 480 MPH cruise, ceiling 44,800 feet, Harm and Harpoon capable, crew 2, ferry range 2,697 nautical miles, with full combat load 937 miles. The Marine Corps' two squadrons of A-6Es are being replaced by six aircraft squadrons of F/A-18Ds. Wing span 53 feet, length 54 ft 9in. |
| EA-6B PROWLER | 650 MPH / 480 MPH cruise, 38 K ceiling with 5 ECM pods, range 2,000 nm with max external fuel, crew of 4. The EA-6B gives the landing force commander and excellent weapon against enemy air defenses. Marine Prowlers can operate from prepared airfields, expeditionary airfields, or aircraft carriers. The Marines have four squadrons of five aircraft each. |
| AV-8B HARRIER | 630 MPH, ferry range 2,100 nm unrefueled, armament -cluster, genral purpose, laser-guided bombs, rockets, Maverick and Sidewinder missile, 25mm cannon, 16,500 pound bombs, crew one. A V/STOL jet, the normal mode of employment is short takeoff using 300-1200 feet of ground rolle. There are eight squadrons of 20 aircraft. and a training squadron of 35 aircraft. One squadron has completed night-attack transition, and a second is in the process. Had a 83% OR in Desert Storm and was the most forward deployed tactical fixed wing aircraft in the war. |
| F/A-18 HORNET | 1360 + mph, ceiling 50,000, range F: 400 nm, A: 575nm, carries Sparrow, Sidewider, Harpoon, Harm, new AMRAAM. The F/1-18 has replaced the F-4 phantom in all 10 of the Marines fighter squadrons, the Reserves are currently under going transition. for six squadrons. F/A-18Ds will be acquired to replace five squadrons of A-6Es, one squadron of RF-4Bs, and squadrons of OA/TA-4s. |
| KC-130 HERCULES | 348 MPH at 19,000 feet; cruise, 331 MPH, range tanker mission, 1000 nautical mile radius; cargo mission, 2,875 nautical miles, can transport 38,258 pounds, can transport 92 Marines or 64 parachutist. Carrying wounded, it can handle 74 litter patients. The Marines operate 36 KC-130Fs and 14 KC-130Rs. The Reserves operate 20 KC-130Ts. crew: two pilots, one navigator, one flight engineer, and one radio operator / loadmaster. |

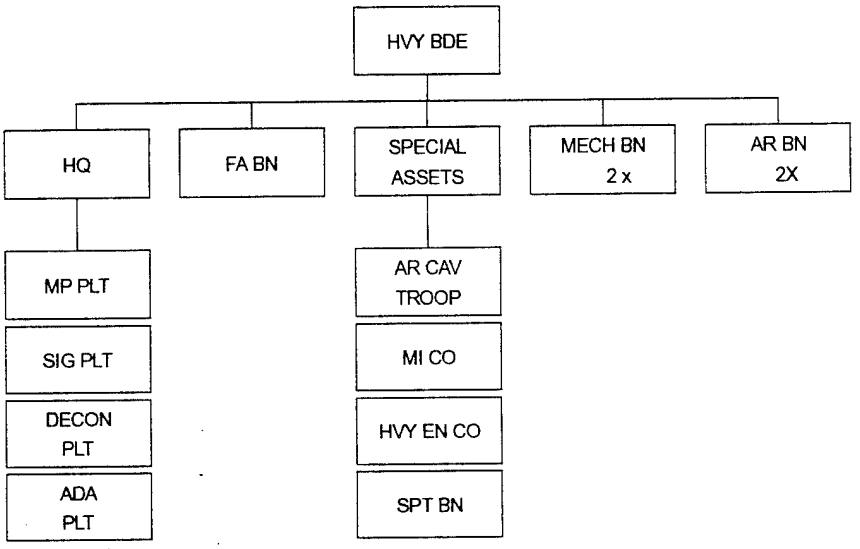
## APPENDIX A. MPF/ MARINE CORPS ORGANIZATION AND CAPABILITIES

| UNITED STATES MARINE CORPS' ROTARY WING AIRCRAFT CAPABILITIES | |
|---|---|
| AH-1W SEA COBRA | 190 KTS, range 256nm, crew of two, 20mm nose gun turret, 2.75" and 5.0" rockets, Hellfire and TOW anti-tank missiles, Sidewinder air to air missiles and Sidearm anti-radiation missiles. Provides fire support coordination to the landing force during amphibious assaults and subsequent operations ashore. The Marines presently operate six composite squadrons with 12 AH-1 and 12 UN-1N aircraft. |
| UH-1N HUEY | 121 KTS, range 172 nautical miles, armament 7.62 mm or .50 cal machine gun; 2.75" rockets, crew of two, weight empty 6,370 pounds; maximum weight loaded, 10,500 pounds. Can carry 8-10 combat-loaded Marines and/or supplies. As a ambulance, it has room for six litter patients and one attendant. The Marines have six composite LIGHT ATK squadrons with 12 UH and 12 AH aircraft |
| V-22 OSPREY | 275 MPH cruise, 300 MPH dash, crew 3, 24 troops or 12 litters, cargo capacity: 10,000 pounds internal, 15,000 external, has SOF application. Can achieve altitudes of 30,000 feet. The Marines plan to field 500 to replace existing medium-lift aircraft. |
| CH-46 D SEA KNIGHT | 130 kts. Can accomodate 25 troops or 15 litters. External lift is 10,000 pounds. Aircraft is over 30 years old. |
| CH-53E SUPER STALLION | 150KTS, 27,900 flight ceiling, 16,600 hover ceiling, range 1120nm, can move 16 ton payload 50nm or a 10 ton payload 500nm. Carriers 55 troops. |

APPENDIX B. APA ORGANIZATION BREAKDOWN

NOTE: The basic TOE started off as the separate brigade TOE, it is being refined based upon Vigilant Warrior and other events.

## APA HEAVY BRIGADE (SEP BDE TOE)




APA Brigade is the old separate brigade TOE. It is capable of conducting sustained operations unliike a normal divisional brigade. It has fixed organizations that includes CBT, CS, and CSS units.

APPENDIX B. APA ORGANIZATION BREAKDOWN

| APA (INTERIM PROGRAM) BN TASK FORCE ORGANIZATION BREAKDOWN | | | | |
|---|---|---|---|---|
| **TF1-CAPE HORN** | **TF2-CAPE HENRY** | **TF3-CAPE HUDSON** | **TF4-CAPE DOUGLAS** | **TF5-CAPE DECISION** |
| **AR BN TF** | **IN BN TF** | **IN BN TF** | **AR BN TF** | **FWD SPT BN** |
| MANEUVER ASSETS | | | | |
| AR BN HHC | IN BN HHC | IN BN HHC | AR BN HHC | |
| AR BN (ENHANCEMENT KIT) | IN BN (ENHANCEMENT KIT) | IN BN (ENHANCEMENT KIT) | AR BN (ENHANCEMENT KIT) | |
| 2 X AR CO | 2 X IN CO | 2 X IN CO | 2 X AR CO | |
| 2 X IN CO | 2 X AR CO | 2 X AR CO | 2 X IN CO | |
| IN BN HHC (MST) | AR BN HHC (MST) | AR BN HHC (MST) | IN BN (MST) | |
| | BDE HHC | | | |
| COMBAT SUPPORT ASSETS | | | | |
| | | FA BTRY (MLRS) | | |
| FA BTRY | FA BTRY | FA BTRY | | |
| FA BN HHB (FSTV) | FA BN HHB (FSTV) | FA BN HHB (FSTV) | | |
| FA SVC BTRY | FA SVC BTRY | FA SVC BTRY | | |
| EN CO | EN CO | | EN CO | |
| | | | EN BN HHC | |
| | | | EN BN (ENHANCEMENT) | |
| AD PLT (BSFV) | AD PLT (BSFV) | 3 X AD STGR SEC & HQS | | |
| | | AD CO (ENHANCEMENT) | | |
| MP PLT | | | | MP CO (-) |
| | | | MI CO | |
| | | | CHEM CO | |
| COMBAT SERVICE SUPPORT ASSETS | | | | |
| | | | | CS SPT BN (-) |
| | | | | CS SPT BN (ENHANCEMENT KIT) |
| TC TRML SVC CO (SDP) | TC TRML SVC CO (SDP) | TC TRML SVC CO (SDP) | TC TRML SVC CO (SDP) | TC TRML SVC CO (SDP) & HQS |
| CS MAINT CO FSB (MST) | CS MAINT CO FSB (MST) | CS MAINT CO FSB (MST) | CS MAINT CO FSB (MST) | FSB HQS |
| TC SQD (HET) | CS SUP CO FSB (HET) | | TC SQD (HET) | TC SQD (HET) & HQS |
| | SC CO | | | OD PLT (MOADS) |

## APPENDIX B. APA ORGANIZATION BREAKDOWN

| APA (OBJECTIVE PROGRAM) TASK FORCE ORGANIZATION BREAKDOWN | | | | | |
|---|---|---|---|---|---|
| **TF1-LMSR1** (INTEL/RECON) | **TF2-LMSR2** (DEEP FIGHT/C2) | **TF3-LMSR3** (ENGINEER) | **TF4-LMSR4** (LOGBUILDUP) | **TF5-LMSR5** (LINEBACKER) | **GOPHER STATE** (LINEBACKER) |
| **AR BN TF** | **AR BN TF** | **IN BN TF** | **IN BN TF** | **CORPS CSS** | **TERMINAL BN & CAUSEWAY** |
| MANEUVER ASSETS | | | | | |
| AR BN HHC | AR BN HHC | IN BN HHC | IN BN HHC | HHC CS | |
| AR BN (ENHANCEMENT KIT) | AR BN (ENHANCEMENT KIT) | IN BN (ENHANCEMENT KIT) | AR BN (ENHANCEMENT KIT) | HHD CSB | |
| 2 X AR CO | 2 X IN CO | 2 X IN CO | 2 X AR CO | | |
| 2 X IN CO | 2 X AR CO | 2 X AR CO | 2 X IN CO | | |
| IN BN HHC (MST) | AR BN HHC (MST) | IN BN HHC (MST) | IN BN (MST) | | |
| | BDE HHC | | | | |
| COMBAT SUPPORT ASSETS | | | | | |
| | FA BTRY (MLRS) | | | | |
| FA BTRY | FA BTRY | FA BTRY | | | |
| FA BN HHB (FSTV) | FA BN HHB (FSTV) | FA BN HHB (FSTV) | | | |
| FA SVC BTRY | FA SVC BTRY | FA SVC BTRY | | | |
| EN CO CBT HVY | EN CO & HHC | EN CO CBT HVY | | EN CO CBT HVY & HQS | |
| | | | | | |
| | | | | | |
| AD PLT (BSFV) | 3 X AD STGR SEC & HQS | AD PLT (BSFV) | | | |
| | AD CO (ENHANCEMENT) | | | | |
| MP PLT | MP PLT | | | | |
| MI CO | | | | | |
| CHEM CO | | | | | |
| | SIG CO | | | | |
| COMBAT SERVICE SUPPORT ASSETS | | | | | |
| | | | | CS SPT BN (-) | CO HQ |
| | | | | CS SPT BN (ENHANCEMENT KIT) | COMP GRP |
| | | | | TC TRML SVC CO (SDP) & HQS | HHC TRML BN |

## APPENDIX B. APA ORGANIZATION BREAKDOWN

| | | | SPT BN (-) | FSB HQS | CAUSEWAY SYS |
|---|---|---|---|---|---|
| TC PLT (HET) 2 EA. | TC PLT (HET) 2 EA. | TC PLT (HET) 2 EA. | TC PLT (HET) & HQS | TC CO LT/MDM | |
| OD PLT | OD PLT | OD PLT & HQS | | OD PLT (MOADS) | |
| TC PLS PLT | TC PLS PLT | TC PLS PLT & HQS | | | |
| TC POL PLT 2 EA. | TC POL PLT 2 EA. | TC POL PLT | TC POL PLT 2 EA. & HQS | TC POL PLT | |
| | | POL PL & TRML | TC CARGO PLT & HQS | | |
| CORPS MCC | MCT (AIR) | | HHD TMT | | |
| SDP | SDP | SDP | SDP | SDP | |
| | CARGO TRANSFER | CSE | TTP | | |
| | | | | MCT | |
| | | | | AUTO CGO DOC | |
| | | | | CONTRACT DET. | |
| | | | | MMC (-) | |
| | | | | DS SUPPLY CO | |
| | | | | ARID WATER TEAM | |
| | | | | FORCE PROV | |
| | | | | DS MAINT CO. | |
| | | | | | |
| | | | | | |

## MPF / APA - COMBAT POWER COMPARISION

| STATUS | EQUIPMENT | MPSRONS (1,2, & 3) | AWR-3 |
|---|---|---|---|
| EMBARKED EQUIPMENT | M1A1 TANKS | 90 (being upped to 174 tanks 58 per MPSRON) | 123 |
| | M2A2 BRADLEY W/TOW INFANTRY FIGHTING VEH | 0 | 154 |
| | LIGHT ARMORED VEH | 75 (12 W/TOW) | 0 |
| | ARMORED PERSONNEL CARRIER | 0 | 100 |
| | AMPHIBIOUS ASSAULT VEHICLE | 327 | 0 |
| | HUMMWVs ARMED | 387 (216 W/TOW) | 40 |
| | HAWK LAUNCHERS | 24 | 0 |
| | STINGER LAUNCHERS | 135 | 20 |
| | PERSONNEL W/EQUIP | 31,000 | 19,900 |
| | **SORTIES** | **222** | **152** |
| EQUIPMENT NOT EMBARKED | FIXED WINGS A/C | 183 | TBD |
| | ROTARY WING A/C | 189 | AVN BDE TBD |
| | AIR DEFENSE | HAWK MISSILES TBD | PATRIOT TBD |
| | ADDITIONAL PERSONNEL | 21,000 | TBD |
| | SORTIES | 525 | TBD |
| | **TOTAL SORTIES** | **747** | **TBD** |

SOURCE HQS USMC POE

## APPENDIX C. MPF VERSUS APA COMPARISONS

### MPF/APA COMPARISONS

| | MPF | MPF (E) | AWR-3 (INTERIM) | AWR-3 (FINAL) |
|---|---|---|---|---|
| **TIME** | | | | |
| Speed (Knots) | 16-20 | 16-20 | 16-20 | 16-24 |
| 1ST Combat Arrival Day | | | | |
| MED | 1 | 1 | 9 | 9 |
| SWA | 7 | 7 | 4 | 4 |
| Korea | 4 | 4 | 9 | 9 |
| Assembly (Days) | | | | |
| Doctrine | 10 | 10 | 10 | 10 |
| Actual | 10 (Desert Storm) | 10 | 7 (Vigilant Warrior - 5 Ships offloaded) | N/A |
| **CAPABILITY** | | | | |
| Total Ships | 13 | 16 | 14 | 16 |
| Shipping | MULTIPURPOSE | MULTIPURPOSE | FUNCTIONAL - 5 TYPES | FUNCTIONAL - 5 TYPES |
| **Port Access** | | | | |
| Water Draft (Ft) | 32-34 | TBD | 32-36 | 32-35 |
| Air Draft (Ft) | 121-187 | TBD | 120-127 | 120-135 |
| Length (Ft) | 673-821 | TBD | 610-893 | 610-954 |
| SWA (%) | 63 | 63 | 63 | 63 |
| Africa (%) | 45 | 45 | 37 | 37 |
| West Pacific (%) | 49 | 49 | 49 | 49 |
| MED (%) | 53 | 53 | 53 | 53 |
| **Instream** | | | | |
| Causeway | 133 | 163 | 47 | 47 |
| LCU | 0 | 0 | 4 | 4 |
| LCM-8 | 26 | 50 | 6 | 6 |
| OPP | | | | |
| Join Prior | Yes | Yes | Yes | Yes |
| Join Enroute | Yes | Yes | Yes | Yes |
| Join After Arrival | Yes | Yes | Yes | Yes |
| **CAPACITY** | | | | |
| **Loading** | | | | |
| Admin | 0 | 0 | 7 | 12 |
| Contingency | 13 | 3 | 5 | 4 |
| Square feet | 1.8 M | 2.2M | 0.9 M | 2.0 M |
| Containers | 6,640 | 9,600 | 4,000 | 5,660 |
| Break Bulk (Cubic Ft) | 0.4 M | TBD | 3.9M | 3.9M |
| Bulk Fuel/Water (Gal) | 17.1M | 0 | 0 | 1.0M |
| Bulk (Gal) | 1.2M | 0 | 0 | 0 |
| **PROGRAM** | | | | |
| Ownership | 25 yr charter | Govt owned | Govt owned - 8 ships 5 yr charter - 6 ships | Govt owned - 9 ships 5 yr Charter -7 |
| Service Life | 2,025 | 2,025 | N/A | 2,045 |
| 2010 Options | Recharter (5 yr) | N/A | N/A | N/A |

Source: HQS, USMC (POE)

## APPENDIX D. MPF vs APA -- MISSION TYPE CONSIDERATIONS

| HEAVY BRIGADE MISSIONS | MEU (SOC) MISSIONS |
|---|---|
| • Movement to Contact | • Amphibious Raids |
| • Hasty Attack | • Limited Objective Attacks |
| • Deliberate Attack | • NEOs |
| • Exploitation | • Show of Force |
| • Pursuit | • Reinforcement Operations |
| • Follow and Support | • Security Operations |
| • Covering Force Operations | • Maritime Interdiction Operations |
| • Defend in Sector | • Civilian Military Operations |
| • Delay in Sector | • Military Tactical Deception Opns. |
| • Breakout from Encirclement | • Fire Support Control |
| • Linkup Operations | • Airfield Security |
| • Relief Operations | • Reconnaissance and Surveillance |
| • Hasty Water Crossings | • Trap |
| • Demonstration | • Littoral Hostage Rescue |
| • Battle Handover and Passage of Lines | • Mobile Training Team |
| | • Mout |
| • Withdrawal | • Gas Oil Platform (GEOPLAT) |
| • Retirement | • Counter-Intelligence Operations |
| • Breeching Operations | • SIGINT / EW |
| | • Special Demolition Operations |

APPENDIX E. MARITIME PREPOSITION FORCES ADDITIONAL PLANNING CONSIDERATIONS FOR MPF AND APA.

## MARITIME PREPOSITIONING FORCES PLANNING CONSIDERATIONS

CAPABILITIES:

- Flexibility to move forces to the region prior to forces being mobilized
- Mobility an flexibility to concentrate forces quickly in an AOR
- Presence/Deterrence
- Conserves critical strategic airlift and fast sealift ships (FSS)
- Economy of force measure in a secure AOR to preclude the requirement for forcible entry
- Means to deploy forces with minimal impact on other deployed forces given an early decision and secure area
- Rapidly reinforce a forward deployed force using the seed of airlift and the lift capacity and rapid response of prepositioned sealift.
- Preemptively occupy/defend LOCs
- Support an ally prior to hostilities
- Provide a secure area for follow-on forces

LIMITATIONS:

- Lack of opposed forcible entry capability
- Need for secure area from deployment to completion of arrival and assembly with link-up forces.
- Fixed set of equipment and supplies once loaded.
- Extreme complexity/lack of simplicity
- Divides the force
- Interdependence of the elements on follow-on forces
- Time critical and space intensive
- Requires support in AOR prior to arrival
- Requires adequate road network between port, airfield, and beach.
- could be viewed as escalatory in nature
- Vulnerable to attack.
- Infrastructure

AIRLIFT CONSIDERATIONS:

- Subject to the host nation invitation and support, overflight and access fights
- Loss of calculated ambiguity of intent
- Subject to availability to airfields and proximity to ports
- throughput of airfields, support assets

Source: Revised from Maritime Prepositioning Force (MPF) Operations OH-1-5, USMC

## ENDNOTES

[1] Hon. Sam Nunn, US Senator, D. GA., Speech to the United States Senate, July 2, 1992.

[2] United States Marine Corps, Fleet Marine Force Manual, 1-2, The Roles of the Marine Corps in the National Defense, Department of the Navy, Headquarters United States Marine Corps, Washington, DC: 21 June 1991, p. 2-7.

NOTE: "Maritime prepositioning is naval in character. Maritime prepositioning and amphibious operations are complementary capabilities. Amphibious operations provide the wherewithal for forcible entry, while maritime prepositioning permits rapid deployment to areas where force introduction will be unopposed. Maritime prepositioning is primarily intended for support of naval campaigns aimed at establishing control of the seas, supporting a continental campaign, or reinforcing national policy in situations short of declared war." FMFM, p. 2-7.

[3] Maj. James J. Hill, "Maritime Prepositioning Force: Is it Time to Expand the Capability?" Marine Corps Gazette, June 1993, p. 32.

[4] Richard B. Rainey, Jr., Mobility--Airlift, Sealift and Prepositioning. P-3303. Santa Monica, CA: Rand, February 1966.

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[30] ibid.

[31] ibid.

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[33] Les Aspin, Secretary of Defense, Annual Report to the President and the Congress, January 1994.

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[35] Wisniewski. p. 22.

[36] USMC "Maritime Prepositioning Force Briefing", May 1995.

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[40] ibid.

[41] Stuart L. Perkins, Global Demands: Limited Forces, U.S. Deployment. National Defense University Press, Fort Lesley J. McNair, Washington DC. p. 37.

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NOTE: "In 1961, President Kennedy, enunciated the strategy of "flexible response." This strategy envisioned, among other initiatives, the creation of specially tailored expeditionary forces which could be dispatched quickly by means of intercontinental, high-speed, large payload, wide-bodied aircraft and fast deployment

logistics ships to any trouble spot throughout the globe. Secretary of Defense created Strike Command to 'furnish rapidly deployable combat-ready forces in an emergency situation ...The backbone of Strike Command was a 100,000 man Strategic Army Corps (STRAC) supported by some 50,000 Air Force TAC personnel. No Marines were included." Col. Mackubin T. Owens, USMCR.

[45] FM100-5, p. 6-12.

[46] ibid. p. 6-2.

[47] Joint Publication 3-0: Doctrine for Joint Operations. Washington, DC: 3 September 1993, p. II - 4.

[48] FM 100-5. p. 6-9.

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[50] ibid. p. 6-12.

[51] ibid. p. 6-13.

[52] Army Afloat Prepositioning Brief. ODCSOPS NOV. 10, 93

[53] Vuono.

[54] Vuono

[55] Vuono

[56] FM 100-5 p. 2-12.

[57] unknown

[58] FM 100-5, p. 2-12.

[59] Tucker. p. 40.

[60] FM 100-5, p. 2-13.

[61] Interview conducted with USMC, MAJ. John , Armor officer.

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